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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,756	07/24/2007	Murray Edward Bruce Leighton	769-399	3380
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DAY PITNEY LLP				
ACCOUNT: ILLINOIS TOOL WORKS INC.				
7 TIMES SQUARE				
NEW YORK, NY 10036-7311				
EXAMINER				
GOFF II, JOHN L				
ART UNIT		PAPER NUMBER		
1746				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/593,756

**Applicant(s)**LEIGHTON, MURRAY EDWARD  
BRUCE**Examiner**

John L. Goff

**Art Unit**

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 May 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3.5-7.9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3.5-7.9 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### **Continued Examination Under 37 CFR 1.114**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/29/10 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### **Claim Rejections - 35 USC § 112**

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:  

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
4. Claims 1-3, 5-7, 9, and 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
5. Claim 1 requires “the end portion of the zipper being free from applied pressure when the probe is introduced into the engaged end portions of the zipper profiles”. Claim 7 requires “the

zipper profile end portions being free from applied pressure when the probe is in the second position.”. Applicants specification does not describe that when the probe is introduced the end portion of the zipper is free from applied pressure. Applicants figures suggest that pressure is applied when the probe is introduced. Figure 1 is described as showing element 28 for applying external pressure to the end portion of the zipper 10. Figure 2 depicts element (28) on top of the end portion of the zipper which appears to at least necessarily apply pressure to the end of the zipper profiles from the weight of the element. Additionally, it is not clear how the probe could be introduced into the zipper longitudinally along the length as in Figure 2 without the zipper moving from its position in Figure 1 without element (28) applying at least some pressure to hold the zipper in the groove (16). Finally, although it is noted Figures 2-5 depict deforming by reducing the thickness of the end portion of the zipper after withdrawing the probe there is no suggestion in applicants specification or the figures that prior to the reduction in thickness no pressure was applied to the zipper. The new limitations were not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

#### **Claim Rejections - 35 USC § 102**

6. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Barradas (U.S. Patent 2,715,087).

Barradas discloses an apparatus comprising a receptacle (11), a clamp (15, 16), and a movable heated probe (14) (Figures 1-5 and Column 1, lines 15-39 and Column 2, lines 3-55 and Column 4, lines 5-10).

As to the “means for receiving a pair of zipper profile lengths in engagement with each other over at least over an end portion at which the profiles are to be joined”, this claim limitation is considered to invoke 35 USC 112 sixth paragraph and has been treated as such. The receptacle (11) is capable of performing the identical function of the claimed means, i.e. receiving a pair of zipper profile lengths in engagement with each other over at least an end portion at which the profiles are to be joined, such that the receptacle is considered an equivalent means.

As to the probe “movable between a first position in which, in use, it is clear of the engaged profile lengths and a second position in which it has penetrated into the material of the end portions, wherein the probe is movable between its first and second positions in a direction substantially longitudinally of the profiles”, the probe taught by Barradas is movable between first and second positions including a first portion in which, in use, it is clear of engaged profile lengths and a second position in which it has penetrated into material of the end portions, wherein the probe is movable between the first and second positions in a direction substantially longitudinally of the profiles.

As to the “means for heating the probe”, this claim limitation is considered to invoke 35 USC 112 sixth paragraph and has been treated as such. Barradas necessarily teaches an unillustrated heating element for heating the front portion of the probe which element is capable of performing the identical function of the claimed means, i.e. heating the probe, such that the element is considered an equivalent means.

As to the “means for applying external pressure to the zipper profile end portions when the probe is in its first position, the zipper profile end portions being free from applied pressure

when the probe is in the second position”, this claim limitation is considered to invoke 35 USC 112 sixth paragraph and has been treated as such. The clamp (15, 16) is capable of performing the identical function of the claimed means, i.e. applying external pressure to the zipper profile end portions when the probe is in its first position clear of engaged profile lengths and not applying pressure when the probe is in its second position, such that the clamp is considered an equivalent means.

Regarding the limitation of “for joining the ends of a pair of zipper profiles”, “for receiving a pair of zipper profile lengths in engagement with each other over at least over an end portion at which the profiles are to be joined”, “which is movable between a first position in which, in use, it is clear of the engaged profile lengths and a second position in which it has penetrated into the material of the end portions, wherein the probe is movable between its first and second positions in a direction substantially longitudinally of the profiles”, “for heating the probe”, and “for applying external pressure to the zipper profile end portions when the probe is in its first position, the zipper profile end portions being free from applied pressure when the probe is in the second position”, these limitations are directed to either the material worked upon or the intended use of the apparatus. “Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim.” (MPEP 2115). The apparatus taught by Barradas is capable of working upon the materials claimed, i.e. a pair of zipper profiles. A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim (MPEP 2114). The apparatus taught by Barradas includes all of the

claimed structure of the claims, i.e. means for receiving, probe, means for heating, and means for applying, which structure is capable of the claimed intended use.

### **Claim Rejections - 35 USC § 103**

7. Claims 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inagaki (JP 55045379) in view of Barradas.

Inagaki discloses an apparatus for heat sealing both ends of a plastic tube containing a baked cake comprising a receiving means (not illustrated but necessarily receiving/supporting the plastic tube in Figure 3), and movable heat seal bars (5) at opposite ends of the receiving means (Figures and abstract). Inagaki does not teach the use of a heated probe. However, it was known in the art to use a heated probe in place of the heating means in the seal bars to apply heat for sealing to the inside of the tube as opposed to the outside of the tube to make a perfect seal with the least amount of decomposition of the plastic material that is non-porous and will not transmit gases or vapors, in particular water vapor as evidenced by Barradas (more fully described above). It would have been obvious to one of ordinary skill in the art at the time the invention was made to remove the heating means for the seal bars in Inagaki and replace them with a heated probe as suggested by Barradas to seal the baked cake with a perfect seal.

As to the “means for receiving a pair of zipper profile lengths in engagement with each other over at least over an end portion at which the profiles are to be joined”, this claim limitation is considered to invoke 35 USC 112 sixth paragraph and has been treated as such. The receiving means (not illustrated but necessarily receiving/supporting the plastic tube in Figure 3) in Inagaki as modified by Barradas is capable of performing the identical function of the claimed

means, i.e. receiving a pair of zipper profile lengths in engagement with each other over at least an end portion at which the profiles are to be joined, such that it is considered an equivalent means.

As to the probe “movable between a first position in which, in use, it is clear of the engaged profile lengths and a second position in which it has penetrated into the material of the end portions, wherein the probe is movable between its first and second positions in a direction substantially longitudinally of the profiles”, the probe taught by Inagaki as modified by Barradas is movable between first and second positions including a first portion in which, in use, it is clear of engaged profile lengths and a second position in which it has penetrated into material of the end portions, wherein the probe is movable between the first and second positions in a direction substantially longitudinally of the profiles.

As to the “means for heating the probe”, this claim limitation is considered to invoke 35 USC 112 sixth paragraph and has been treated as such. Inagaki as modified by Barradas necessarily teaches an unillustrated heating element for heating the front portion of the probe which element is capable of performing the identical function of the claimed means, i.e. heating the probe, such that the element is considered an equivalent means.

As to the “means for applying external pressure to the zipper profile end portions when the probe is in its first position, the zipper profile end portions being free from applied pressure when the probe is in the second position”, this claim limitation is considered to invoke 35 USC 112 sixth paragraph and has been treated as such. The seal bars (5) in Inagaki as modified by Barradas are capable of performing the identical function of the claimed means, i.e. applying external pressure to the zipper profile end portions when the probe is in its first position clear of



engaged profile lengths and not applying pressure when the probe is in its second position, such that the seal bars are considered an equivalent means.

Regarding the limitation of “for joining the ends of a pair of zipper profiles”, “for receiving a pair of zipper profile lengths in engagement with each other over at least over an end portion at which the profiles are to be joined”, “which is movable between a first position in which, in use, it is clear of the engaged profile lengths and a second position in which it has penetrated into the material of the end portions, wherein the probe is movable between its first and second positions in a direction substantially longitudinally of the profiles”, “for heating the probe”, and “for applying external pressure to the zipper profile end portions when the probe is in its first position, the zipper profile end portions being free from applied pressure when the probe is in the second position”, these limitations are directed to either the material worked upon or the intended use of the apparatus. “Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim.” (MPEP 2115). The apparatus taught by Inagaki as modified by Barradas is capable of working upon the materials claimed, i.e. a pair of zipper profiles. A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim (MPEP 2114). The apparatus taught by Inagaki as modified by Barradas includes all of the claimed structure of the claims, i.e. means for receiving, probe, means for heating, and means for applying, which structure is capable of the claimed intended use.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barradas as applied to claim 7 above or Inagaki and Barradas as applied to claims 7 and 10 above, and further in view of Johnson (U.S. Patent 3,388,021).

Barradas teaches the probe is heated with the front portion of the probe comprising a conductive metal. Barradas does not further describe the probe. It is conventionally known to heat a probe by including an electrical heating element (79) within a rear portion of the probe as evidenced by Johnson (Column 7, lines 70-74). It would have been obvious to one of ordinary skill in the art at the time the invention was made to heat the probe in Barradas or Inagaki as modified by Barradas using an electrical heating element within the rear portion of the probe conventionally known in the same art as evidenced by Johnson only the expected result of heating the probe being achieved.

### **Response to Arguments**

9. Applicant's arguments with respect to claims 1-3, 5-7, 9, and 10 have been considered but are moot in view of the new ground(s) of rejection.

In view of applicants amendment and arguments thereto the previous rejections are withdrawn. The new limitations are fully addressed above.

### **Conclusion**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is (571)272-1216. The examiner can normally be reached on M-F (7:30 AM - 4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katarzyna Wyrozebski can be reached on (571) 272-1127. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John L. Goff/  
Primary Examiner, Art Unit 1746